

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method of translating data, comprising:
obtaining a value of an implementation data structure from an instrumented program during execution of the instrumented program, wherein the instrumented program is compiled code comprising the implementation data structure ~~is internal to the instrumented program~~;
accessing a translator associated with the instrumented program, wherein the translator comprises a plurality of transformations; and
translating the value of the implementation data structure using the translator to obtain translated data of an interface data structure, wherein the translating comprises applying at least one of the plurality of transformations to convert ~~a representation the value~~ of the implementation data structure into [[an]] the translated data of the interface data structure, wherein the interface data structure ~~corresponds to~~ is associated with an interface offered provided by the instrumented program;
in response to an instrumentation request from a user, providing the translated data to the user to ~~wherein the translated data is configured to satisfy [[an]] the instrumentation request from a user~~, wherein the instrumentation request is a request to perform a function of one of a group consisting of a tracing program and a debugging program.
2. (Previously Presented) The method of claim 1, further comprising:
executing the tracing program to enable a probe in the instrumented program based on the instrumentation request;
triggering the probe in the instrumented program; and
transferring translated data from the translator to an execution framework, wherein the execution framework comprises a tracing framework.

3. (Previously Presented) The method of claim 1, further comprising:
executing the debugging program in the instrumented program in response to the
instrumentation request; and
transferring translated data to an execution framework in response to the instrumentation
request, wherein the execution framework comprises a debugger.
4. (Original) The method of claim 1, wherein the translator is defined using a high-level
programming language.
5. (Original) The method of claim 1, wherein the translator is updated independently of the
execution framework.
6. (Original) The method of claim 1, further comprising:
delivering the translator using an encoded delivery.
7. (Original) The method of claim 1, further comprising:
delivering the translator using a compiled delivery.
8. (Original) The method of claim 1, further comprising:
selecting the translator using an instrumentation request.
9. (Original) The method of claim 1, further comprising:
selecting the translator using knowledge of a function argument type of the instrumented
program.

10. (Currently Amended) A system for translating data, comprising:
a memory configured to:
store an instrumented program, wherein the instrumented program is compiled code comprising at least one an implementation data structure, wherein the implementation data structure is internal to the instrumented program;
store a translator comprising a plurality of transformations;
a processor configured to:
execute a compiler arranged to compile the plurality of transformations into the translator; and
execute an execution framework configured to:
obtain a value of the implementation data structure from the instrumented program during execution of the instrumented program,
use the translator to convert ~~at least one~~ the value of the implementation data structure into an interface data structure to obtain translated data, wherein the interface data structure ~~corresponds to~~ is associated with an interface offered by the instrumented program, and
in response to an instrumentation request from a user, provide the translated data to the user ~~wherein the translated data is configured to satisfy~~ [[an]] the instrumentation request ~~from a user,~~ wherein the instrumentation request is a request to perform a function of one of a group consisting of a tracing program and a debugging program.
11. (Currently Amended) The system of claim 10, wherein the instrumentation request explicitly translates the value of the ~~at least one~~ implementation data structure into the translated data.
12. (Currently Amended) The system of claim 10, wherein a function call implicitly triggers the translating the value of the ~~at least one~~ implementation data structure into the translated data.
13. (Original) The system of claim 10, wherein the translator is defined using a high-level programming language.

14. (Original) The system of claim 10, wherein the translator is updated independently of the execution framework.
15. (Original) The system of claim 10, wherein the translator is delivered using at least one selected from the group consisting of encoded delivery and compiled delivery.
16. (Original) The system of claim 10, wherein the execution framework comprises at least one selected from the group consisting of a tracing framework and a debugger.
17. (Currently Amended) A computer system for translating data, comprising:
 - a processor;
 - a memory;
 - a storage device; and
 - software instructions stored in the memory for enabling the computer system to:
 - obtain a value of an implementation data structure from an instrumented program during execution of the instrumented program, wherein the instrumented program is compiled code comprising the implementation data structure is internal to the instrumented program;
 - access a translator associated with the instrumented program, wherein the translator comprises a plurality of transformations; and
 - translate the value of the implementation data structure using the translator to obtain translated data of an interface data structure, wherein the translating comprises applying at least one of the plurality of transformations to convert ~~a representation~~ the value of the implementation data structure into ~~[[an]]~~ the translated data of the interface data structure, wherein the interface data structure ~~corresponds to~~ is associated with an interface offered by the instrumented program;
 - in response to an instrumentation request from a user, provide the translated data to the user ~~wherein the translated data is configured~~ to satisfy ~~[[an]]~~ the instrumentation request ~~from a user~~, wherein the instrumentation request is a

request to perform a function of one of a group consisting of a tracing program and a debugging program.

18. (Original) The computer system of claim 17, wherein the translator is defined using a high-level programming language.
19. (Original) The computer system of claim 17, wherein the translator is updated independently of the execution framework.
20. (Original) The computer system of claim 17, further comprising software instructions to deliver the translator using an encoded delivery.
21. (Original) The computer system of claim 17, further comprising software instructions to deliver the translator using a compiled delivery.
22. (Original) The computer system of claim 17, further comprising software instructions to select the translator using the instrumentation request.
23. (Original) The computer system of claim 17, further comprising software instructions to select the translator using knowledge of a function argument type of the instrumented program.